Summary pdf file on 9 free ebooks entitled: Software Solutions to Problems on Heat Transfer

Authored by: Dr. M. Thirumaleshwar

Published by: Bookboon

Introduction

The study of Heat Transfer is central to Mechanical and Energy Engineering, bridging the gap between theoretical thermodynamics and practical thermal system design. It deals with the principles of energy transmission by conduction, convection, and radiation, and their applications in numerous engineering systems such as heat exchangers, boilers, condensers, and cooling devices.

This collection of nine ebooks, authored by Dr. M. Thirumaleshwar and published by Bookboon, provides a comprehensive and software-integrated approach to solving heat transfer problems. Each volume covers a major topic area in the university syllabus, offering both conceptual clarity and step-by-step Mathcad-based solutions for a wide range of practical problems.

Together, these ebooks form a complete learning and reference resource for students, teachers, and practicing engineers. They present a rare blend of theoretical rigor, worked examples, and computational analysis—making them highly useful for self-study and classroom use alike.

This summary PDF serves as a single-point reference, providing direct access links to each of the nine volumes in the series.

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About the Author

Dr. M. Thirumaleshwar obtained his B.E. in Mechanical Engineering from Karnataka Regional Engineering College, Surathkal, India, M.Sc. in Cryogenics from the University of Southampton, U.K., and Ph.D. in Cryogenics from the Indian Institute of Science, Bangalore.

He has served in leading research and academic institutions including Bhabha Atomic Research Centre (BARC), Bombay, Centre for Advanced Technology (CAT), Indore, and as Guest Collaborator in the Superconducting Super Collider Project, Texas, U.S.A., as well as in several engineering colleges as Professor, Head of Department, and Principal.

A dedicated teacher and prolific author, he has published several free engineering ebooks on Thermodynamics, Heat Transfer, and Cryogenics, benefiting students and teachers worldwide.

List of Ebooks and Access Links

1. Conduction – Part I

https://app.box.com/s/eg92t7qwuym1yynctnorw4o1gm357qz2

2. Conduction – Part II

https://app.box.com/s/kvw792som4nffct4sucz7h1xn0y3vzxz

3. Conduction – Part III

https://app.box.com/s/g21d6zbfexlkd6dtn2dkgvhqdto8byqb

4. Convection – Part I (Forced Convection)

https://app.box.com/s/t3cq5mbb4en19fmx3s0i4gehyj7ut0ls

5. Convection – Part II (Natural Convection)

https://app.box.com/s/c61m0apk6izlqv71bmn1cote4s6fj059

6. Radiation – Part I

https://app.box.com/s/yrt7ydsqoxdoscoki6pb9z1ilkba54pf

7. Radiation – Part II

https://app.box.com/s/08y0mhn9qxd98xyxuxrmpawtcxfgbjsw

8. Boiling

https://app.box.com/s/bwyaloqiiaphgkzbhiukxzajjg390com

9. Heat Exchangers

https://app.box.com/s/wrarcu74z84jkwv9qvsza0atcqoo93bl

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